

fragment is adjacent the C-terminus of the second peptidyl fragment.

119. A method according to claim 78 wherein the first peptidyl fragment is positioned within the second peptidyl fragment.

120. A method according to claim 78 wherein the method further includes cleaving the at least one cleavable peptidyl fragment.

121. A method according to claim 78 wherein the at least one cleavable peptidyl fragment is an Arg or Lys residue.

122. A method according to claim 78 wherein the at least one cleavable peptidyl fragment is at least 2 amino acids in length where the C-terminal amino acid residue is selected from the group consisting of Arg and Lys.

123. A chimeric protein comprising:
a first peptidyl fragment;
a second peptidyl fragment comprising an amino acid sequence which exhibits insulin-like bioactivity when folded in a bioactive conformation; and
at least one cleavable peptidyl fragment linking the first and second peptidyl fragments;
wherein the first peptidyl fragment is selected such that it mediates folding of the second peptidyl fragment to cause the second peptidyl fragment to adopt the bioactive conformation.

124. A protein according to claim 123 wherein the second peptidyl fragment is capable of being bound by an anti-human-insulin antibody.

125. A protein according to claim 123 wherein the second peptidyl fragment is an insulin precursor.

126. A protein according to claim 123 wherein the second peptidyl fragment is an insulin precursor of human origin.

127. A protein according to claim 123 wherein the second peptidyl fragment comprises SEQ. ID. No. 4.

128. A protein according to claim 123 wherein the second peptidyl fragment comprises SEQ. ID. No. 5.

129. A protein according to claim 123 wherein the second peptidyl fragment comprises A chain and B chain amino acid sequences of human insulin separated by an amino acid sequence between 1 and 34 residues in length.

130. An assay for improving bioactive conformation mediation activity comprising:
taking an amino acid sequence of a first recombinant protein comprising a first peptidyl fragment, a second peptidyl fragment comprising an amino acid sequence which comprises at least two cysteine residues which form at least one cysteine bridge in a bioactive conformation of the second peptidyl fragment, and a cleavable peptidyl fragment linking the first and second peptidyl fragments, where the first peptidyl fragment has sufficient homology to at least a first 20 N-terminal amino acids of human growth hormone (hGH) protein that the first peptidyl fragment mediates formation of the bioactive conformation of the second peptidyl fragment;

expressing a second recombinant protein where the amino acid sequence of the first peptidyl fragment has been modified relative to the first recombinant protein; causing the second peptidyl fragment of the second recombinant protein to adopt the bioactive conformation;

determining a yield for the step of causing the second peptidyl fragment of the second recombinant protein to adopt the bioactive conformation; and

comparing the yield for the step of causing the second peptidyl fragment of the second recombinant protein to adopt the bioactive conformation to a yield for causing the second peptidyl fragment of the first recombinant protein to adopt the bioactive conformation. --.